REMARKS

I. Introduction

In response to the Office Action dated November 14, 2005, claims 3, 8 and 13 have been canceled, and claims 1, 4, 6, 9, 11 and 14 have been amended. Claims 1-2, 4-7, 9-12 and 14-15 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Obviousness-Type Double Patenting Rejections

In section (2) of the Office Action, claims 1-15 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims (1, 5, 7-8) of co-pending Application No. 09/939,813.

Applicants' attorney notes the provisional nature of this rejection, and will substantively address these rejections upon an indication of otherwise allowable claims.

III. Claim Objections

In section (3) of the Office Action, claims 3, 8 and 13 were objected to under 37 C.F.R. §1.75(c) as being in improper dependent form for failing to limit the subject matter of a previous claim.

Applicants' attorney has canceled these claims as indicated above to overcome these objections.

IV. Prior Art Rejections

A. The Office Action Rejections

In paragraph (4) of the Office Action, claims 1-15 were rejected under 35 U.S.C. §102(a) as being anticipated by Sheard et al., U.S. Patent No. 6,208,345 (Sheard).

Applicants' attorney respectfully traverses these rejections.

B. The Applicants' Independent Claims

Independent claims 1, 6 and 11 are generally directed to developing multi-tier business applications. The computer-implemented system of claim 1 is representative, and comprises an Integrated Development Environment (IDE), executed by a computer, for creating and maintaining a multi-tier business application on a multiple tier computer network, wherein the IDE includes a

Topological Multi-Tier Business Application Composer that is used by a developer to graphically create and maintain the multi-tier business application, a Meta-model that captures and persistently stores information entered via the Composer, and an Interactive Agent that monitors the Meta-model for an occurrence of an event that comprises a possible non-optimization in a portion of the multi-tier business application based upon an heuristic analysis of information gathered by the Composer and stored within the Meta-model, wherein the Interactive Agent operates from a knowledge base stored as a part of the Meta-model, and the knowledge base is structured in such a way that the occurrence of the event causes the Interactive Agent to access the knowledge base to identify context information comprising a list of suggested and recommended actions for the event, in order to trigger a display of a graphical element including the context information in the Composer to interact with the developer.

C. The Sheard Reference

Sheard discloses a visual data integration system architecture and methodology. The system architecture includes a transport framework that represents a technology-independent integration mechanism that facilitates the exchange of technology-dependent data between disparate applications. A visual interface facilitates the design, deployment, and runtime monitoring of an integrated information system implementation. An integrated information system is developed visually through use of the visual interface by dragging and dropping components within a canvas area of the interface. The components are graphical representations of various telecommunications hardware and software elements, such as information stores, processors, input/output devices and the like. Various components may be packaged together as business extension modules that provide specific business integration capabilities. Interconnections between components are graphically established using a mouse to define sources and destinations of specified data. An underlying configuration/runtime information framework operating above and in concert with the transport framework effectively transforms the graphical interconnections into logical or physical interconnections, which results in the contemporaneous generation of an integrated runtime system. Format neutral data meta-models are employed to model the input and output data requirements of disparate systems and system components so as to remove any cross-dependencies that exist between the systems and technologies implicated in a data integration project. The visual interface enables runtime control and analysis of the business information and system aspects of an integrated system implementation. Visual views onto the live deployment provide consistent management and

control for system integrators, business integrators, system managers, and business managers using a single visual interface.

D. The Applicants' Invention is Patentable Over the Reference

The Applicants' invention, as recited in independent claims 1, 6 and 11, is patentable over the reference, because it contains limitations not taught by the reference.

In Sheard, if two meta-data models are determined to be incompatible, then the two adapters in question are visually marked in the canvas to indicate the presence of a configuration error, such as by the use of an "X" or other warning indicia. See Sheard at col. 23, lines 35-55.

Similarly, in Sheard, when a user selects two adapters, and then connects them with a line that represents a queue, the user interface performs a lookup to the meta-models for each of the adapters and then compares them. If the models are inconsistent, the color or other visually perceivable characteristic of the interconnecting line is changed to alert the user that the two models cannot "plug and play" without performing some degree of custom mapping. See Sheard at col. 31, line 47 - col. 32, line 4.

Nowhere does Sheard teach or suggest an Interactive Agent that operates from a knowledge base stored as a part of the Meta-model, wherein the knowledge base is structured in such a way that the occurrence of the event causes the Interactive Agent to access the knowledge base to identify context information comprising a list of suggested and recommended actions for the event, in order to trigger a display of a graphical element including the context information in the Composer to interact with the developer.

Instead, the graphical elements displayed by Sheard merely comprise an "X" or other warning indicia, or a change in color, or some other visually perceivable characteristic that alerts the user. However, nowhere does Sheard refer to the display of context information comprising a list of suggested and recommended actions for the event.

Indeed, the only citation by the Office Action is to FIG. 17 and the accompanying text at col. 19, lines 51-63, which refers to "[t]he lower border 546 of the visual interface 501 is available for high-level status information and for help prompts that may be useful during configuration." However, no context information comprising a list of suggested and recommended actions for the event is shown in FIG. 17 or described in the specification. Instead, the identified field is blank in FIG. 17 and the help prompts are only generally described in the specification.

Sheard: FIG. 17

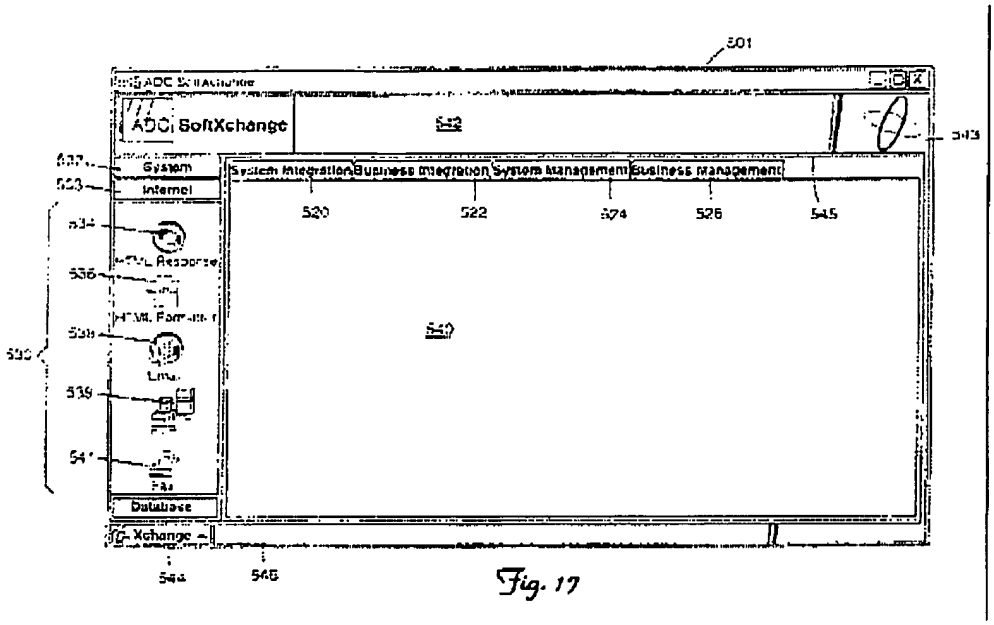

Fig. 17

Sheard: col. 19, lines 51-63

In the bottom left corner of the visual interface 501 is an Xchange button 544. Activating the Xchange button 544 opens a pop-up menu of common system wide commands and configuration controls. A first group of menu buttons, which may be accessed via an appropriately configured tool bar or by activation of the Xchange button 544, may operate on project files, and include the following activatable buttons: new, open, save, delete, and print. A second group of buttons may include start, shutdown, pause and resume the system buttons, for example. Menu items may be disabled when their operation is not appropriate for a given context. The lower border 546 of the visual interface 501 is available for high-level status information and for help prompts that may be useful during configuration.

Thus, Sheard does not anticipate or render obvious Applicants' claimed invention. Moreover, the various elements of Applicants' claimed invention together provide operational advantages over Sheard. In addition, Applicants' invention solves problems not recognized by Sheard.

Applicants' attorney submits that independent claims 1, 6, and 11 are allowable over Sheard. Further, dependent claims 2, 4-5, 7, 9-10, 12 and 14-15 are submitted to be allowable over Sheard in the same manner, because they are dependent on independent claims 1, 6, and 11, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 2, 4-5, 7, 9-10, 12 and 14-15 recite additional novel elements not shown by Sheard.

V. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

GATES & COOPER LLP
Attorneys for Applicants

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: February 14, 2006

By: _____
Name: George H. Gates
Reg. No.: 33,500

GHG/

G&C 30571.265-US-01